UNITED SCIENCE

811 Pine Street, St. Croix Falls, WI 54024

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **CUSTOMER:** | NEMADJI LLC. | **SAMPLE NUMBER/ ID:** | |
| **PRODUCT NAME:** | CBG ISOLATE | **CERTIFICATION DATE:** | 20APR20 |
| **PACKAGE SIZE:** | | **MANUFACTURE DATE:** | 17APR20 |
| **LOT NUMBER:** | NM 000123 | **EXPIRATION DATE:** | |
| **DESCRIPTION** | CBG ISOLATE FROM HEMP | | |
| **STORAGE CONDITIONS:** | KEEP AWAY FROM EXPOSURE TO LIGHT. | | |
| **STATE/COUNTRY OF ORIGIN (HEMP):** | WISCONSIN,USA | | |

| **POTENCY BY HPLC*** | | | |
|---|---|---|---|
| **CANNABINOID NAME** | **% POTENCY** | **CONC. mg/g** | **LOQ (%)** |
| CBG | 99.59 | 995.90 | 0.001 |
| CBGA | <LOQ | | 0.001 |
| CBDA | <LOQ | | 0.001 |
| CBD | <LOQ | | 0.001 |
| THCA | <LOQ | | 0.001 |
| THC | <LOQ | | 0.001 |
| THCV | <LOQ | | 0.001 |
| CBN | <LOQ | | 0.001 |
| CBC | <LOQ | | 0.001 |
| **TOTAL CBG** | **99.59** | **995.90** | |
| **TOTAL CBD** | | | |
| **TOTAL THC** | | | |
| **TOTAL CANNABINOIDS** | **99.59** | **995.90** | |

UNITED SCIENCE
811 Pine Street, St. Croix Falls, WI 54024

| TEST DESCRIPTION | SPECIFICATION | RESULTS | STATUS |
|---|---|---|---|
| APPEARANCE | WHITE POWDER | AS SPECIFIED | PASS |
| SOLUBILITY | SPARINGLY SOLUBLE IN WATER | N/A | N/A |
| ORGANOLEPTIC | N/A | AS SPECIFIED | PASS |

**PESTICIDES BY LCMS/MS**

| ANALYTE | Result (PPB) | ACTION LEVEL (PPB) | LOQ (PPB) | Status | ANALYTE | Result (PPB) | ACTION LEVEL (PPB) | LOQ (PPB) | Status |
|---|---|---|---|---|---|---|---|---|---|
| **ABAMECTIN** | **<LOQ** | 0.500 | 0.100 | PASS | **IMAZALIL** | **<LOQ** | 0.200 | 0.100 | PASS |
| **ACEPHATE** | **<LOQ** | 0.400 | 0.100 | PASS | **IMIDACLOPRID** | **<LOQ** | 0.400 | 0.100 | PASS |
| **ACEQUINOCYL** | **<LOQ** | 2.000 | 0.750 | PASS | **KRESOXIM METHYL** | **<LOQ** | 0.400 | 0.100 | PASS |
| **ALDICARB** | **<LOQ** | 0.400 | 0.100 | PASS | **METALAXYL** | **<LOQ** | 0.200 | 0.100 | PASS |
| **AZOXYSTROBIN** | **<LOQ** | 0.200 | 0.100 | PASS | **METHIOCARB** | **<LOQ** | 0.200 | 0.100 | PASS |
| **BOSCALID** | **<LOQ** | 0.200 | 0.100 | PASS | **METHOMYL** | **<LOQ** | 0.400 | 0.100 | PASS |
| **BIFENAZATE** | **<LOQ** | 0.400 | 0.100 | PASS | **MGK-264** | **<LOQ** | 0.200 | 0.100 | PASS |
| **BIFENTHRIN** | **<LOQ** | 0.200 | 0.100 | PASS | **MYCLOBUTANIL** | **<LOQ** | 0.200 | 0.100 | PASS |
| **CARBARYL** | **<LOQ** | 0.200 | 0.100 | PASS | **NALED** | **<LOQ** | 0.500 | 0.100 | PASS |
| **CARBOFURAN** | **<LOQ** | 0.200 | 0.100 | PASS | **OXAMYL** | **<LOQ** | 1.000 | 0.100 | PASS |
| **CHLORANTRANILIPROLE** | **<LOQ** | 0.200 | 0.100 | PASS | **PACLOBUTRAZOL** | **<LOQ** | 0.400 | 0.100 | PASS |
| **CHLORPYRIFOS** | **<LOQ** | 0.200 | 0.100 | PASS | **PARATHION- METHYL** | **<LOQ** | 0.200 | 0.250 | PASS |
| **CLOFENTEZINE** | **<LOQ** | 0.200 | 0.100 | PASS | **PERMETHRIN** | **<LOQ** | 0.200 | 0.100 | PASS |
| **CYPERMETHRIN** | **<LOQ** | 1.000 | 0.100 | PASS | **PHOSMET** | **<LOQ** | 0.200 | 0.100 | PASS |
| **DAMINOZIDE** | **<LOQ** | 1.000 | 0.100 | PASS | **PIPERONYLBUTOXIDE** | **<LOQ** | 2.000 | 0.100 | PASS |
| **DIAZINON** | **<LOQ** | 0.200 | 0.100 | PASS | **PRALLETHRIN** | **<LOQ** | 0.200 | 0.100 | PASS |
| **DICHLORVOS** | **<LOQ** | 0.100 | 0.100 | PASS | **PROPICONAZOLE** | **<LOQ** | 0.400 | 0.100 | PASS |
| **DIMETHOATE** | **<LOQ** | 0.200 | 0.100 | PASS | **PROPOXUR** | **<LOQ** | 0.200 | 0.100 | PASS |
| **ETHOPROPHOS** | **<LOQ** | 0.200 | 0.100 | PASS | **PYRETHRINS** | **<LOQ** | 1.000 | 0.100 | PASS |
| **ETOFENPROX** | **<LOQ** | 0.400 | 0.100 | PASS | **PYRIDABEN** | **<LOQ** | 0.200 | 0.100 | PASS |
| **ETOXAZOLE** | **<LOQ** | 0.200 | 0.100 | PASS | **SPINOSYN A** | **<LOQ** | 0.200 | 0.100 | PASS |
| **FENOXYCARB** | **<LOQ** | 0.200 | 0.100 | PASS | **SPINOSYN D** | **<LOQ** | 0.200 | 0.100 | PASS |
| **FIPRONIL** | **<LOQ** | 0.400 | 0.100 | PASS | **SPIROMESIFEN** | **<LOQ** | 0.200 | 0.100 | PASS |
| **FLONICAMID** | **<LOQ** | 1.000 | 0.100 | PASS | **TEBUCONAZOLE** | **<LOQ** | 0.400 | 0.100 | PASS |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FLUDIOXONIL** | **<LOQ** | 0.400 | 0.100 | PASS | **THIACLOPRID** | **<LOQ** | 0.200 | 0.100 | PASS |
| **HEXYTHIAZOX** | **<LOQ** | 1.000 | 0.100 | PASS | **THIAMETHOXAM** | **<LOQ** | 0.200 | 0.100 | PASS |
| **SPIROTETRAMAT** | **<LOQ** | 0.200 | 0.100 | PASS | **TRIFLOXYSTROBIN** | **<LOQ** | 0.200 | 0.100 | PASS |
| **SPIROXAMINE** | **<LOQ** | 0.400 | 0.100 | PASS | | | | | |

| **HEAVY METALS BY ICP-MS** | | | | |
|---|---|---|---|---|
| **ANALYTE** | **RESULT (PPB)** | **ACTION LEVEL (PPB)** | **LOQ (PPB)** | **STATUS** |
| **ARSENIC (As)** | **<LOQ** | **500.0** | **100.0** | PASS |
| **CADMIUM (Cd)** | **<LOQ** | **500.0** | **100.0** | PASS |
| **LEAD (Pb)** | **<LOQ** | **500.0** | **100.0** | PASS |
| **MERCURY (Hg)** | **<LOQ** | **500.0** | **100.0** | PASS |

| **MYCOTOXINS BY LCMS/MS** | | | | |
|---|---|---|---|---|
| **ANALYTE** | **RESULT (PPB)** | **ACTION LEVEL (PPB)** | **LOQ (PPB)** | **STATUS** |
| **AFLATOXIN B1** | **<LOQ** | | **6.0** | PASS |
| **AFLATOXIN B2** | **<LOQ** | | **6.0** | PASS |
| **AFLATOXIN G1** | **<LOQ** | | **6.0** | PASS |
| **AFLATOXIN G2** | **<LOQ** | | **6.0** | PASS |
| **AFLATOXIN TOTAL** | **<LOQ** | **20.0** | **6.0** | PASS |
| **OCHRATOXIN A** | **<LOQ** | **20.0** | **12.0** | PASS |

UNITED SCIENCE
811 Pine Street, St. Croix Falls, WI 54024

| RESIDUAL SOLVENTS BY GC-HEADSPACE* | | | |
|---|---|---|---|
| ANALYTE | SPECIFICATION (PPM) | RESULTS (PPM) | STATUS |
| METHANOL | **<3000** | **ND** | PASS |
| PENTANE | **<5000** | **Pass** | PASS |
| ETHANOL | **<5000** | **ND** | PASS |
| ACETONE | **<5000** | **ND** | PASS |
| N-HEXANE | **<290** | **ND** | PASS |
| ETHYL ACETATE | **<5000** | **ND** | PASS |
| HEPTANE | **<5000** | **ND** | PASS |

**APPROVED** **DATE: 20APR20**
**Laboratory Director, Dr. Teshome B.**

IMPORTANT: THE INFORMATION PRESENTED HEREIN, WHILE NOT GUARANTEED, WAS PREPARED BY TECHNICAL PERSONNEL AND IS TRUE AND ACCURATE TO THE BEST OF OUR KNOWLEDGE. NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESSED OR IMPLIED, IS MADE REGARDING PERFORMANCE, SAFETY, STABILITY, OR OTHERWISE. THIS INFORMATION IS NOT INTENDED TO BE ALL-INCLUSIVE AS TO THE MANNER AND CONDITIONS OF USE, HANDLING, STORAGE, DISPOSAL AND OTHER FACTORS THAT MAY INVOLVE OTHER OR ADDITIONAL LEGAL, ENVIRONMENTAL SAFETY OR PERFORMANCE CONSIDERATIONS. UNITED SCIENCE ASSUME NO LIABILITY WHATSOEVER FOR THE USE OF OR RELIANCE UPON THIS INFORMATION. SAFE HANDLING, STORAGE AND USE IS THE RESPONSIBILITY OF THE CUSTOMER. NO SUGGESTIONS OF USES ARE INTENDED AS, AND NOTHING HEREIN SHALL BE CONSTRUED AS A RECOMMENDATION TO INFRINGE ON ANY EXISTING PATENTS OR VIOLATE FEDERAL, STATE OR LOCAL LAWS.

*TESTING HAS A DEFINED “MEASUREMENT OF UNCERTAINTY” WHICH IS THE PARAMETER, ASSOCIATED WITH THE RESULT OF A MEASUREMENT, THAT CHARACTERIZES THE DISPERSION OF THE VALUES THAT COULD REASONABLY BE ATTRIBUTED TO THE PARTICULAR QUANTITY SUBJECT TO MEASUREMENT. THE MEASUREMENT OF UNCERTAINTY IS SIMILAR TO A MARGIN OF ERROR. WHEN THE MEASUREMENT OF UNCERTAINTY, NORMALLY EXPRESSED AS A +/− WITH A NUMBER, (E.G., +/− 0.05) IS COMBINED WITH THE REPORTED MEASUREMENT, IT PRODUCES A RANGE AND THE ACTUAL MEASUREMENT HAS A KNOWN PROBABILITY OF FALLING WITHIN THAT RANGE (TYPICALLY 95%). THIS DEFINITION IS BASED ON THE DEFINITION OF “UNCERTAINTY (OF MEASUREMENT)” IN SECTION 2.2.3 OF THE JOINT COMMITTEE FOR GUIDES IN METROLOGY 100:800, EVALUATION OF MEASUREMENT DATA—GUIDE TO THE EXPRESSION OF UNCERTAINTY IN MEASUREMENT (JCGM GUIDE). NIST TECHNICAL NOTE 1297, GUIDELINES FOR EVALUATING AND EXPRESSING THE UNCERTAINTY OF NIST MEASUREMENT RESULTS (TN 1297), IS BASED ON THE JCGM GUIDE. USDA ALSO RELIED ON THE EURACHEM/CO-OPERATION ON INTERNATIONAL TRACEABILITY IN ANALYTICAL CHEMISTRY'S “GUIDE ON USE OF UNCERTAINTY INFORMATION IN COMPLIANCE ASSESSMENT, FIRST EDITION 2007.”

ND=<LOQ; TOTAL CBD= (CBDA*0.877)+CBD; TOTAL CBG= (CBGA*0.877)+CBG; TOTAL THC= (THCA*0.877)+THC; PPM= PARTS PER MILLION; PPB= PARTS PER BILLION